

[§ 3]

Athenian News: OR, Dunton's Oracle.

From Saturday August the 19th, to Tuesday August the 22d, 1710.

A Voyage made at Home: Or, the Anatomical and Intellectual Post, the Terra Incognita, in the little World (MAN).

The Voyage Life, is longest made at Home.—Cowly.

Generals do not much affect us, nor are Things distinctly known by a general View of them, we then see and understand them best, when we consider each apart by it self. The World is too large a Prospect to be taken up at once; we will therefore descend to Particulars, and begin at Home.

Take a View but of the outward Make and Figure of the *Body of Man*: Consider the Variety of Parts, the Symmetry, Situation and Proportion, either in Respect to the whole, or to each other; the Firmness of the Feet, the Strength of the Legs, the well-compacted Thickness of the Thighs, the Stateliness of the Trunk, the Force of the Arms, the Contrivance and innumerable Uses of the Hand, the Comeliness and Beauty of the Face, the Majesty of the Countenance, and the Ornament of the Hair. The finest Painters, and most curious Statuaries, think they cannot shew their Skill better, than to imitate these, and tho' the best Imitation of them be very rude in Comparison with the Original, yet even these rude Counterfeits have been much admired, and have procured much Honour and Fame to those who made them. Now if the Copy be admired, what doth the Original deserve? if the Picture or Statue shew Art and Skill, shall the Original be ascribed to Chance? Is it not more reasonable to think that it is the Work of some wise and excellent Hand?

2. Especially if we penetrate into the inward

Frame and Texture, which is altogether unimitable; none was ever so mad as to attempt it. When the outward covering of the Skin, which also is admirable, being a Net of Nerves curiously interwoven; when this (I say) is lay'd aside, what a wonderful Contrivance appears of Bones, Musles, Arteries, Nerves, and other Vessels, which both astonish the wisest, and also afford them Matter of curious Enquiry. Since the Beginning of the World, all the wise and curious have been prying into the Body of Man, dissecting and anatomicizing the Parts of it. Some have spent their whole Life in considering but one particular Part; and yet after so many thousand Years, there is no perfect Discovery, either of the whole, or almost of any Part. There is a *Terra incognita*, even in this *little World*. As there are at this Day better Anatomists than whom former Ages could boast of; so the most Skilful do acknowledge ingenuously, that they discern neither all the Parts of this admirable Machine, nor yet all the true Uses of those Parts which have been discovered. All the Functions of the Brain and Spleen are not yet understood; and it is but meer Conjecture what is said of several others. Is it not then against common Sense to ascribe to any Thing but perfect Wisdom, what is thus above the Reach of the wisest Men, and what puzzles them to comprehend!

3. To give further Conviction of this Truth, let *Life, Motion and Sense* be considered. What admirable and exquisite Wisdom doth appear in the Frame and Disposal of the *Senses*! As in a City invested with Enemies, and in Danger to be betrayed, it is necessary to advert to all the Motions of those within, and to keep Watch at all the *Ramparts*, and other Places proper for discovering the Advances and dangerous Approaches of the Enemy. So it is necessary to the Preservation

Preservation of the Body, that both its outward and inward State be perfectly understood, that all the Motions within, and all Applications without be felt, that it may be presently known what are hurtful, and what convenient, what should be cherished, and what prevented; wherefore we see that the *Organs* of this *Sense of Feeling* are posted every where throughout the Body; so that the least Disturbance within, and the slightest Touch without, even in the Extremities, is instantly perceived. *Tasting*, being designed for distinguishing Meats, and for discerning what is agreeable; therefore the Instrument of this *Sense* is the *fore-part* of the Tongue, which lies at the very Gates of the first Entry or Passage to the Stomach, to secure against what is disagreeable: For if the Faculty of *Tasting*, had been placed more inwards, the disgorging unsavory Things should have been very incommodious. Because all the Ends and Purposes of *Smelling* may be served by one Organ, therefore there is no more, but that is curiously formed, and admirably fitted to receive the insensible Particles, which evaporate from all material Substances, whether animate or inanimate, natural or composed. However the *Organ* of this *Sense* is grosser in Man, than in some other Animals, because they require it far more exquisite. For Example, if the Dog had not this *Sense* in a nicer Measure than Man, he would not be worth keeping; for then he could neither Trace out his Master's Footsteps, nor yet find out where the Partridge feeds, or the Hair has her Seat, which certainly never happened by Accident. If this be not Design, we may make Design and Chance all one; for it is impossible to distinguish them.

The two other Senses being by far the most delightful and profitable, therefore each has two Organs, most wisely situated, and most admirably contrived to answer the Purposes of these two Faculties. The Fabrick and Motion of the Eye is so curious, that never any yet did consider it without Wonder and Astonishment. This is the Foundation of the *Opticks*, which is the most pleasant and curious Part of Mathematicks. Upon which Account, I must say, That if there be Mathematicians who are Atheists, they are of all others most inexcusable: For seeing Vision, and the Fabrick and Motion of the Eye, by which it is performed, is according to the strictest Rules of Mathematicks, and that he must be a Master of that Art, who can unfold the Method and Manner of Vision, and explain the Reasons

of it. Is it not the Height of Impudence? Is it not a Violence to common Sense? Is it not to contradict and baffle Demonstration it self, either to think or say that Vision was contrived, or the Eye framed without Wisdom, or that the Author thereof was not skilled in the Nature of Light, the Rules of Motion, the Doctrine of Refraction and Reflexion, without which the Eye had been no Eye, nor Vision ever effectuated? To secure this necessary Organ from Danger, it is lodged in a well adapted *bony Orbite*; and because only a Body of a Spherical Figure can move easily within another, especially when the whole Space is to be filled up, therefore the Eye is Spherical, which is the only Figure capable of those many Motions which are necessary for discerning the various Objects which surround us; and both to facilitate these Motions, and for performing them rightly, it is tied by various Muscles, interwoven with many Nerves; by the Means of which, it moves up and down, and to either side easily. These Muscles are also so situate, that one is a kind of Curb to the Motion of the other, least the Eye should be in hazard of being reversed: Moreover, they serve to keep the Eye fixed upon Objects, as long as there is Occasion to look at them. The Eye-lids are not only for a Cover when we are asleep; but also they serve to clean and clear it by their Motions, which could not be so safely done by the Hand. As the Eye giveth Life and Beauty to the Countenance, and discovers the inward Thoughts and hidden Temper both of Body and Mind; so nothing could have been more admirably contrived for Vision; being composed of various Humours contained in different Coats. The *Cornua* or *White* is convex, and receiveth different Degrees of Convexity, according as the Objects are far or near; and to render it capable of changing its Figure thus, the Humour next to it is thin, liquid, and pliable, which is therefore called *Aqueous*. The *Pupilla* or *Sight* doth dilate and contract it self, as there is more or less Light. And because various Distances of Objects require different Positions of the *Cristalline Humour*, through which the Rays of Light pass to the *Retina*, where they form the Image of the external Object: For Rays from a nearer Object unite at a greater Distance, than those which come from an Object more remote; therefore the *Cristalline Humour* is pressed upon the *Retina*, by what Anatomists call *Ligamentum Ciliare*, and yet it is kept by the *Vitrious Humour* at such a due Distance, as is necessary for uniting the Rays exactly

exactly upon it. And that the Image of the Object, which is formed upon the *Retina*, may not be disordered by a Reflexion of the Rays which pass through it, therefore the *Choroides* or Coat which surrounds it, is tinctured black, which Colour doth not reflect any Rays; for if it were of another Colour it would, and so hinder a distinct Vision of external Objects. The *Retina*, upon which the Image of all external Objects is formed, is not above an Inch and half, and yet without Calculation, or consulting Experience, or Arithmetical Tables of Proportion, we are made to perceive all Objects distinctly in their just and real Proportions, and at their true Distances, which is a most wonderful Contrivance, altogether impossible without infinite Power and Wisdom, as both this and some other particulars of Vision are inexplicable by humane Reason.

Nor is the *Ear* less curios than the *Eye*: Some offer to prove it more Artificial; but, Comparisons here (as in other Things) are to no Purpose. Certainly, there are as many (if not more) distinct Parts in the Fabrick of the *Ear* than *Eye*. But it not being my Design to give an Anatomical Discourse, I will not offer to dissect it. Notice of all external Sound is given by a delicate *Membrane*, which is guarded by a viscous Substance, lest rude and violent Percussions should break it. There are wonderful *Cavities* for receiving the Impressions and Beatings upon this Membrane, for reverberating them, for modifying and distinguishing them, that they may be clearly understood. All which can be ascribed to nothing less than infinite Wisdom, which contrived the *Eye*, to give us the most delightful Prospect of the most pleasant *Scenes* of the *Divine Opera*; and which formed the *Ear* to entertain us with the sweet Notes which the most melodious *feather'd Chorus* sing to the Praises of their Creator, and especially that by these Means our Souls, tho' strictly chained to, and closely detained in the Body, may be capable of communicating their Thoughts to one another.

Which leads me to the *internal* and *intellectual* *Faculties*; the vast Capacity of the Mind, the quick and lively Force of the Imagination, the incomprehensible Storehouse of the Memory, where Myriads of Things are lay'd up without any Confusion, but ranged in that good Order, as a very Thought can produce them in a Moment. This is a large Subject, I dare not attempt it, lest I be carried too far, or should utter Things not so obvious, or which might occasion Debate. I only mark the Excellency and

Usefulness of these *Faculties*, which every one can understand. It is by the Means of these that we think, reason, discourse, arrive at Wisdom and Knowledge, by comparing Things together, considering their mutual Relations, by judging the present from what is past, by running the Effects up to their Cause, and by taking Measures, both of natural and moral Events and Productions, from the Nature and Conjunction of Causes. By all which Method and Manner of Reasoning, we constantly find that *every Thing must have a Cause*, for *Nothing can produce Nothing*; nor can any Thing give to another the Perfection which it self wants. Motion must have a Mover: Life must proceed from something that lives, and *Art* and *Contrivance* from one or other that understands the same; and consequently the whole System of our Reason must be overturned, the first Principles of Knowledge rejected, and the clearest Perception denied, if *he who planted the Ear did not hear, if he who formed the Eye, did not see, if he who teacheth Man Knowledge, doth not know*. In a Word, if the Author of our Being be not infinitely wise and powerful, to which all Mankind have given their Consent; for as the Latin Orator, and some others have observed, there was never yet found any Nation or People who did not acknowledge a God.

I crave leave to add some few Thoughts more for evincing this.

5. One is taken from the wonderful Contrivance of *nourishing the Body*, and supplying all its Parts. Many rare Inventions have been ruined, because they could not be sustained or repaired: When the secret Springs broke, they perished; and what a Trouble is it to uphold the Machines of Humane Contrivance, or to keep them a going? but as the Author of our Being did foresee that our Bodies were liable to decay, and did waste themselves by acting and moving; so he has most wisely provided against that Evil, and has lay'd down a wonderful easie Method of sending Recruits to all the Parts, far and near; nay, even to these which are wrap'd up in the Heart of others, without doing Prejudice to the surrounding Vessels, which is by receiving a little proper Food into the Mouth, from whence after chewing and mastication, it is conveyed into the Stomach, where it is digested into a liquid Substance, whether by Heat or Acidity, or both, or by the Motion of the Stomach it self, we shall not debate. But however it be, there is a speedy *Dissolution* of what comes there, and a better

Secretion or Separation of the different Substances after Dissolution, than can be by the most expert Chymist. Which Preparation being made, it is instantly discharg'd into Pipes and Canals, of different Sizes, and strangely intersected, which supply every Part with what is necessary; so that the remote Parts are not neglected, nor the nearer Ones sooner supplied: All are equally provided and taken Care of, and at the same Instant refreshed. When the Body is faint and feeble, seems to have lost all his Spirits, and upon the Point of expiring, how suddenly doth a little Food recover it? How soon is its Colour renewed? And how instantly doth it begin to exert Strength and Vigor? Should this be passed over because common? Should it be slighted because ordinary? Should we not regard this wonderful Device, by which our Life is maintained from Day to Day? Methinks, those who are so well pleased with eating and drinking, should thank the Contrivance. Upon this is founded the Custom of asking a *Blessing before Meat*, and of *giving Thanks* after; and to say the Truth, it is not only laudable, but more reasonable and necessary than is commonly believed.

6. And as the *Nourishment of the Body* doth ascrible Wisdom to its Author, so both his Wisdom and Power doth appear in its Generation. What an unlikely Beginning has it? How unaccountable that an *homogeneous Fluid* should be the Foundation of such an *heterogeneous Solid*? We are sure it is, but how it comes to be, cannot be comprehended. The Manner of this Production is as much hid from our Understanding, as the Place from our Eyes. The wisest Philosophers are but Children here; their Principles of Mechanism can give no Light to this Affair; all they say, is but a Heap of fancies and groundless Conjectures. Nor do I believe the sole Power of what is call'd Nature, sufficient; there must be the Guidance of an intelligent Spirit, to regulate Nature, and to see it perform its Duty. As in a Watch, all the Wheels and Parts have a mutual Dependance on each other, and do regulate one anothers Motions, and cannot move without the Spring: Nor this, unless it be wound up by some Hand: So there is a mutual Dependency among the Parts of the Body: They must be all formed at once, and must all perform their Functions together, otherwise not any of them can act or move. The *Circulation of the Blood* is the Cause of *Animal Motion*, or absolutely necessary to it, and the Means of Nourishment. The Blood cannot circulate without the

Motion of the Heart, nor the Heart move without *Animal Spirits*: Nor are *Animal Spirits* formed, but by the *Circulation* and *Secretion of the Blood*; therefore there must be some supervenient Power to influence them all *simul & semel*, to breath Life into them, and to set them a going. And if it be said, that this is now perform'd by the *Blood and Spirits* of the Mother, which circulate in the *fetus*, yet the Argument holds still against the Formation of the *first Man*, without supernatural Aid; which makes out my Purpose, and which is agreeable to the Account we have of Man's Creation in *Genesis*, where it is said, that God *formed Man out of the Ground*, and then *breathed into his nostrils the Breath of Life*; that is, by his Almighty Power he wrought a lumpish Piece of Earth into that wonderful Machine of Man's Body: But the Creation and Conjunction of those external and internal Parts, not being sufficient to give it *Life and Motion*; he also afterwards inspired this, by a second Supernatural Act of Breathing into him. But to leave Philosophizing, and to return to our Subject; how doth the unsuitable and improbable Matter, from which we proceed, argue the Almighty Power of him who contriv'd it? And was it possible, without infinite Wisdom, to provide so wonderfully for the Nourishment and Safety of the Child, during the Nine Months that it continues in the Womb? from which Prison it is also delivered in a strange Manner, which merits Admiration. When all these Things are considered, how much Truth and Force is in that divine Hymn of *David*, where he Commemorates his Generation and Production, and where he saith, *God hath possessed my Reins, thou hast covered me in my Mother's Womb. I will praise thee, for I am fearfully and wonderfully made: Marvellous are thy Works, and that my Soul knoweth right well. My Substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest Parts of the Earth. Thine Eyes did see my Substance, yet being being imperfect, and in thy Book all my Members were written, which in Continuance were fashioned, when as yet there was none of them, Psal. 139. 13, &c.* Job also hath spoken as Philosophically, and much more truly, than any who hath attempted to explain the Formation of the *fetus*, and that in a very few Words; thus, *Hast thou not poured me out as Milk, and curdled me like Cheese? Thou hast clothed me with Skin, and fenced me with Bones and Sinews. Thou hast granted me Life and Favour, and thy Visitation hath preserved my Spirit*, Job. 10. 10.